

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

RECEIVED

OCT 23 1929

U. S. DEPARTMENT OF AGRICULTURE

FARMERS' BULLETIN No. 576 *rev.*

May 1929

Has been rev.

--see rev.ed.

binders at

end of file.

BREEDS OF SHEEP FOR THE FARM



MUTTON AND WOOL qualities both must receive attention in order to obtain the greatest returns from farm flocks of sheep. There are a large number of improved breeds, in each of which special features have been developed to suit particular agricultural conditions.

The prospective sheep raiser needs first to lay out a plan of flock management suitable to his own farm neighborhood and opportunities for selling. With such a plan in mind a breed can be selected possessing the features especially called for.

The raising of purebred stock to be sold for breeding purposes can best be done by experienced shepherds. Foundation ewes should have as much as possible of the blood of the breed which it is expected to use, and none but purebred rams of good individuality should ever be used.

BREEDS OF SHEEP FOR THE FARM.

F. R. MARSHALL,

*Collaborator in Sheep and Goat Investigations, Animal Husbandry Division,
Bureau of Animal Industry.*

(Revised by D. A. Spencer, Animal Husbandry Division.)

CONTENTS.

	Page.		Page.
Value of breeding and choice of breed.....	1	Long-wool breeds.....	9
Classes of sheep.....	2	The Cotswold.....	9
Medium-wool breeds.....	3	The Lincoln.....	10
The Southdown.....	3	The Leicester.....	10
The Shropshire.....	3	Other long-wool breeds.....	11
The Hampshire.....	5	Fine-wool breeds.....	12
The Oxford.....	6	The American Merino.....	12
The Dorset.....	6	The Rambouillet.....	13
The Cheviot.....	8	Crossbred sheep.....	14
Other medium-wool breeds.....	9		

VALUE OF BREEDING AND CHOICE OF BREED.

THE STUDY of raising and disposing of crops to the best advantage suggests more general and more careful production of livestock. In this connection, the possibilities of realizing profits from farm sheep are becoming better and more widely understood.

Variations in wool values explain in large part the increases and decreases in numbers of farm sheep during the past 50 years. At present many former raisers of commercial sheep who breed altogether for wool are giving more attention to mutton, and most of the new flocks being established are of some of the mutton breeds. A system of sheep farming that is to be continuously successful can not ignore either wool or mutton. In many cases the two products will be worthy of equal consideration; in others, either one may be emphasized according to the peculiarities of conditions, management, and marketing.

A decision to raise sheep chiefly for mutton purposes leaves much still to be considered in making a choice of type and breed. The choice of a breed is not the most important question. Any breed is far superior to no breed. Once established, there must be advance in the character and usually in the size of the flock. Such advance can not be made unless the same breed and type is adhered to in securing rams. The female of mixed breeding, no matter how good individually, is an uncertain quantity when used as a breeder. There are enough highly improved breeds to allow a choice of one that will have special fitness for almost any combination of real needs. In this bulletin it is aimed to discuss the breeds in a way that will enable those who are not familiar with them to know which ones are likely to meet the requirements.

Some of the breeds differ very strikingly in appearance. Differences in size, color, and covering of face and legs, while quickly noticed, are not the main points which determine whether a breed is likely to prove satisfactory upon rough pasture land, for winter

lambling, or any of the points that must be taken into account when starting into sheep raising. The breeds differ very widely in their special points of usefulness for various sections and systems of management. The differences are mainly a result of breeding for special qualities needed by the farmers in the localities in which and for which the breed was formed. The minor points, such as color and shape of head, must be regarded as showing how far the animals are true to the type of what the breeders tried to produce, not only in appearance but in breeding and feeding qualities.

In starting into sheep raising the most important thing is to decide what plan can best be followed. The available feed and care and the selling outlets will determine this. If pasturage is sparse, feed expensive, and marketing arrangements poor, wool will need to be the first consideration. If there is a good market for winter lambs and the feed and care that can be given are such as are needed, then the ability of the ewes to get in lamb in the spring and the mutton qualities are the important things to look for in the breeding stock. If it is desired to have lambs come early and to feed them to be sold before the time stomach worms become troublesome, the choice would not fall upon the same breed that would fit in if there was a better chance to keep the lambs on clean pastures and they were expected to take care of themselves more largely through their first summer.

It is not to be expected that all farmers in a county will select the same breed of sheep. Some may wish to follow plans that differ from the ones favored by other farmers. However, there are many advantages that may be realized if a number of farmers in a community adopt a common plan of sheep raising and use rams of the same type, at least, if not of the same breed. If their lambs are similar and ready to ship at the same time, a number of owners can join together to fill a car, or if the number of lambs is large and the quality uniform they will sell themselves, as the buyers will come after them. Another advantage in community breeding is that new rams can be purchased jointly. Owners of two small flocks can go together and buy a better ram than either of them alone would care to pay for. When the daughters of such a ram are ready to breed he can go to another flock in the neighborhood in exchange for one that has been siring good lambs but is too closely related to ewes in his flock to permit of further use.

CLASSES OF SHEEP.

There are 30 breeds of improved sheep that have been brought to fixed types as adapted to the needs of their native homes. Of these, 12 are well established in the United States and a number of others are gaining in popularity. The better-known breeds can be grouped into three classes, each class having its own general qualities.

The medium-wool class includes Southdowns, Shropshires, Hampshires, Oxfords, Dorsets, Cheviots, Suffolks, and Tunis, the last two not being numerous.

The long-wool class includes the Cotswold, Leicester, and Lincoln breeds, and the Romney Marsh, which is not as well known in America as the others.

The fine-wool class includes the American Merino and the Rambouillet. The various strains of Merinos formerly known by numerous names are now grouped into three types, A, B, and C.

MEDIUM-WOOL BREEDS.

The following breeds are included in the medium-wool class: Southdown, Shropshire, Hampshire, Oxford, Suffolk, Dorset, Tunis, and Cheviot. The first five are collectively referred to as "down" breeds, because of the nature of the country in which they were developed. This country is one of ranges of hills or "downs," as they are called in southern England. The "down" breeds have all been bred primarily for mutton, with special emphasis upon some useful character considered necessary for the style of farming and the markets of the various counties or shires from which most of the breeds take their names.

The face and leg color of all the "down" breeds is of some shade of brown or black, and the fleece occupies a middle position between the length and coarseness of the long wools and the extreme fineness and density of the fine wools. While there are breed variations in fineness, length, and density, the fleece is always close and dry enough to furnish excellent protection.

THE SOUTHDOWN.

The Southdown is the oldest of the medium-wool breeds and on that account flocks of the breed are strikingly uniform in their qualities and appearance. Their body conformation is the ideal one for mutton and no breed surpasses them in the estimation of the market. From the raiser's standpoint they are not so large as is desirable. Because of their conformation the weights are large in proportion to the apparent size and they will become fat enough for market while growing. Being of medium size they are more active than larger sheep and better adapted to rolling or hilly pastures. The ewes are good mothers and milkers. With good management the number of lambs raised will average 120 per cent of the ewes bred.

The Southdown is readily recognized by its very blocky, low-set appearance. The breadth of the back, thickness of loin, with the plumpness of the thighs and twist, are breed points of greatest value. The head is short and broad, and the eyes prominent. The fleece is very close, quite fine, but often too short to weigh heavily. The face is sometimes partly covered with wool and varies in its color from brown to mouse color or very light gray. The legs show the same color as the face.

The breeders' association for this breed is American Southdown Breeders' Association, W. L. Henning, secretary, Animal Husbandry Department, Pennsylvania State College, State College, Pa.

THE SHROPSHIRE.

The Shropshire is the most widely known and bred of the "down" breeds in America. In body it is intermediate between Southdown and larger breeds. Shropshires are noted for prolificacy and their excellent combination of mutton and wool production. The lambs develop in frame and flesh at the same time, and while they do not make so rapid gains in frame development as those of some of the larger breeds, with liberal feeding they reach market weight and finish at about weaning time and sell as one of the most popular types for the butcher. This breed is particularly adapted to farm conditions where feed is abundant and flocks are of moderate size.

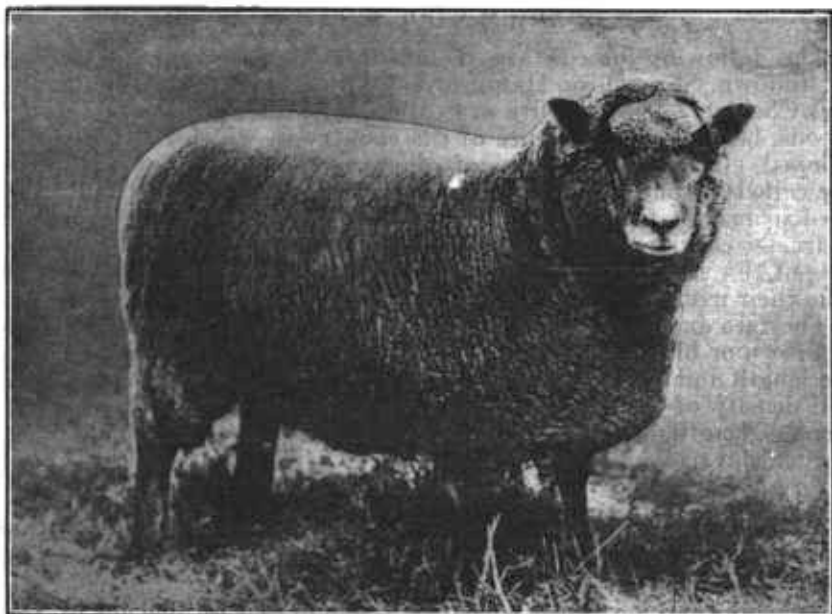


FIGURE 1.—A Southdown ewe.

The blocky, thick build is characteristic of the breed, as well as the full, plump breast and the short head.

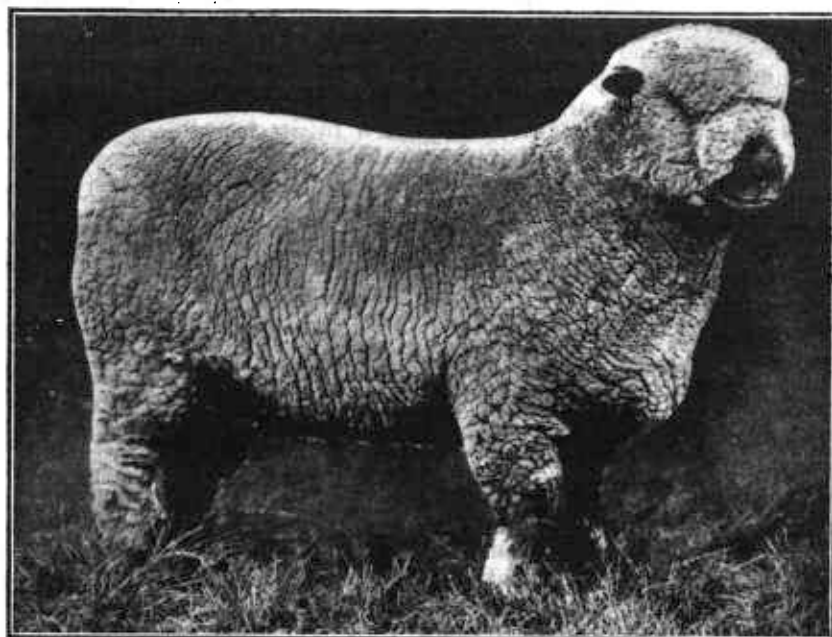


FIGURE 2.—A Shropshire ram.

This illustration shows the desirable face and leg covering and appearance of fleece, but the animal is not as compact in form as is usually preferred.

In weight, length, and fineness of fleece the Shropshire ranks very high and the proceeds of the wool are a very important part of the income from the flock. In breeding for a valuable fleece along with mutton qualities the Shropshire breeders prefer sheep that are well woolled up over the poll, down below the eyes, and on the ears. This, along with the shape of the head and color of face and legs, serves as a distinguishing feature. The head is ordinarily wide between the eyes and ears, short, breedy looking, and varies in color from brown to almost black, the legs where not woolled showing the same color.



FIGURE 3.—A Hampshire ewe.

The square and rugged appearance shown is peculiar to the Hampshire. The nose does not show so prominently as usual. The ears are typical.

Aside from the head, the Shropshire type calls for a very attractive smoothness and compactness of body set upon short legs. This type can be recognized whether the wool is long or short, trimmed or untrimmed, by standing some distance off and studying the outlines and appearance of the animal before endeavoring to examine points of detail.

The breeders' association for this breed is American Shropshire Registry Association, Miss Julia M. Wade, secretary, La Fayette, Ind.

THE HAMPSHIRE.

The strong point of the Hampshire is the rapid rate of growth in the lambs when well fed. This quality is associated with unusual size, the breed being the largest of the medium-wool class. Because

of this feature the breed is favored by persons wishing to get lambs upon the market at an early age and are prepared to furnish feed and care to insure this rapid growth.

The ewes rank with other medium wools in the number of lambs produced, and are fully average in milking qualities and mothering their lambs. On account of its size and weight the Hampshire is not adapted to very rough or scanty pastures.

In appearance the Hampshire is large framed, rather tall, heavy boned, rugged, and somewhat coarse looking. Apart from the size, the head is the most distinctive feature. This is large, strong in the nose in both sexes, black in color, and the ears are large and seldom erect. A fine or a small head is not associated with the qualities upon which the breed's popularity is based. The face is sometimes woolled below the eyes, though commonly only over the crown.

There is a considerable variation in the length and closeness of the fleeces, the opener ones running more to length, but a fairly close and rather coarse fleece is most common and does not shrink heavily in scouring. Associated with the dark color of face and legs, the skin is usually inclined to be blue.

The breeders' association for this breed is American Hampshire Sheep Association, C. A. Tyler, secretary, 72 Woodland Avenue, Detroit, Mich.

THE OXFORD.

An idea of the Oxford may be gained from the fact that the blood of the Hampshire and Cotswold was used in forming the breed. Being a very large and heavy breed, the lambs grow rapidly when well fed, and can be matured early if desired, though not so early as those of some of the less growthy breeds. They fit in well under a plan of slower early growth and later finishing, such as is suitable with the amount and kind of feed and labor available in many sections devoted to mixed farming. The breed is an average of the down breeds in respect to yield of lambs, milking qualities, and length of life.

The fleece of the Oxford is of special importance. While usually more open than in similar breeds, yet it is close enough for protection, and the extra length adds to the weight as well as making it useful when length of fiber, without too great coarseness, is needed.

The typical Oxford is a large-framed, heavy-boned, strong-looking sheep. The appearance of size is added to by the extra length of wool, though some individuals run to the shorter, more compact style of fleece. The head is less coarse and lighter colored than that of the Hampshire. The face and leg color varies, but is usually a light brown, and there is a small white spot on the end of the nose. The face is partly covered with wool. The ears are of medium size and not usually woolled.

The breeders' association for this breed is American Oxford Down Record Association, J. C. Williamson, secretary, Xenia, Ohio.

THE DORSET.

The Dorset is of the medium-wool type, but is not a "down" breed. Both rams and ewes have horns. The faces and legs are white.

The type is one of a little larger and coarser frame with less compactness than is found in the smaller down breeds. Openness of

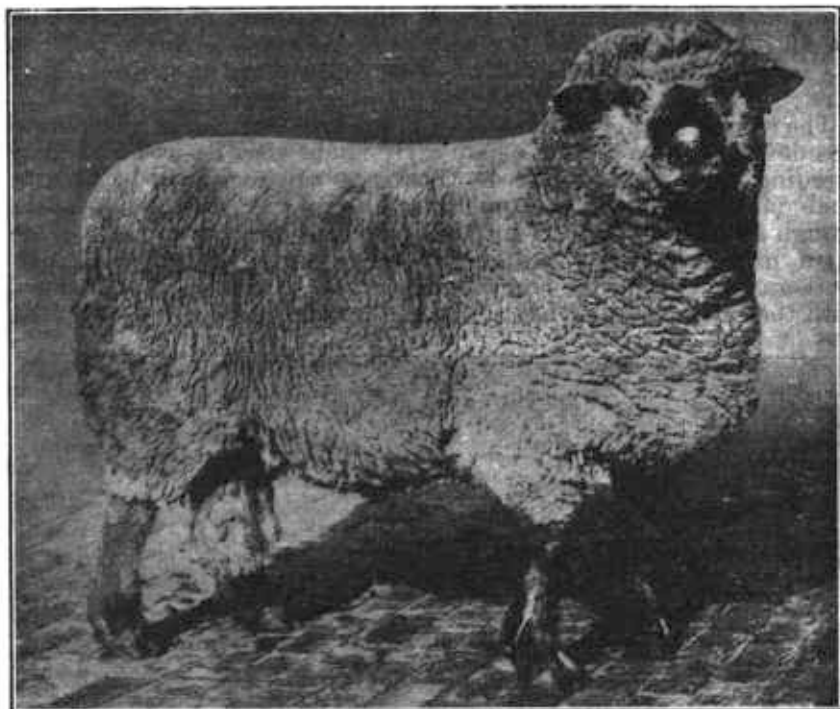


FIGURE 4.—An Oxford ram.

This illustration shows the square type of the Oxford. The fleece does not appear as well as in some of the better specimens of the breed. The shape and expression of the face are typical.

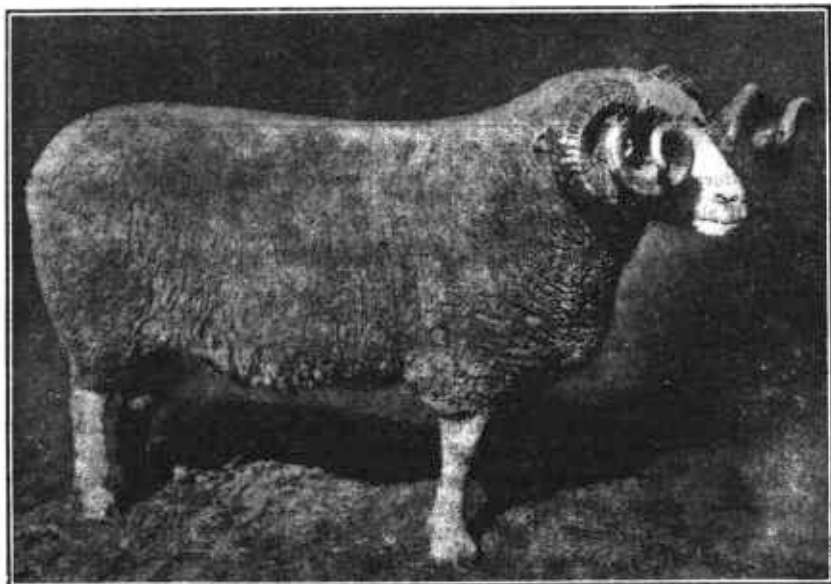


FIGURE 5.—A Dorset ram.

This illustration shows a close fleece. The strength of the head and the horns are characteristic of mature rams of the breed.

shoulder is quite common. The fleece is medium in closeness and length, and coarser than the Shropshire. There is little wool on the face and legs, and the belly is frequently short wooled or nearly bare.

The strong feature of the Dorset is the breeding habit. The breed was developed in a section where early lambs were desired and early breeding ewes were preferred. The ewes can regularly be bred to lamb in the fall. Two crops of lambs in one year are possible, though seldom advised. Twins are quite numerous and the ewes are extra milkers. Partly because of the milking qualities of their mothers the lambs grow and mature rapidly. This point, combined with the early breeding habit, makes the breed particularly popular

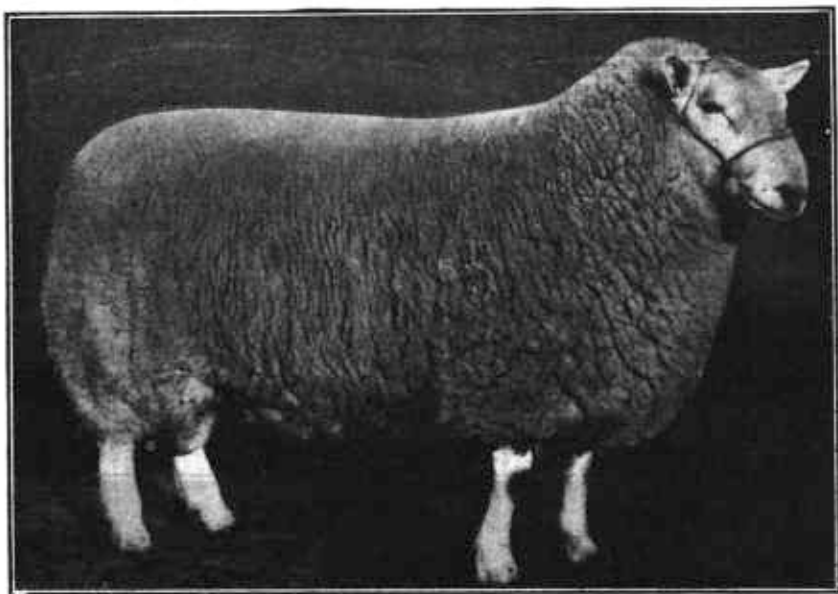


FIGURE 6.—A Cheviot ram.

The general form shown in this illustration is characteristic of the Cheviot. The shape and bareness of the head is also characteristic, but the face has not the appearance of life usually shown.

with farmers raising winter or "hothouse" lambs for marketing from Thanksgiving to Easter.

The breeders' association for this breed is The Continental Dorset Club, Miss Edith Chidester, secretary, Mechanicsburg, Ohio.

THE CHEVIOT.

The Cheviot is a mountain breed. It is accustomed to grazing over rough places and is very active and alert, both in appearance and behavior. It is vigorous and hardy, and capable of producing mutton upon lands unsuited to other breeds.

The breed is distinguished by the short and very blocky appearance, which is due in part to the length of the fairly dense fleece. There are no brown markings, and the bare white face with the strong nose, prominent eye, and erect ear have gained the Cheviots

sharp and poorly covered shoulders are common. In development of hind quarters the breed rivals the Southdown.

The breeders' association for this breed is American Cheviot Sheep Society, G. W. Lough, secretary, Hartwick, N. Y.

OTHER MEDIUM-WOOL BREEDS.

The Suffolk is a "down" breed. The ewes are hardy, very prolific, and heavy milkers. The face and legs are bare, dark black, and the belly wool is light. There is no registry association for Suffolk sheep in the United States. The American Suffolk Flock Registry Association is at Guelph, Ontario, Canada. James Bowman, of that address, is secretary.

The Tunis is an Asiatic sheep, hornless, brown faced, heavy eared, and the wool is white, brown, or reddish, or mixed in color. The breed also has the fat-tail character. The lambs are rapid growers, and the blood is sometimes used by raisers of winter lambs.

The breeders' association for this breed is American Tunis Sheep Breeders' Association, Raymond Hays, secretary, Bainbridge, Ind.

LONG-WOOL BREEDS.

The long-wools, bred chiefly for mutton, are the largest breeds of sheep. All of them are large-framed, square-bodied sheep, with very broad backs. Their fleeces are open or loose as compared with the fine wools and middle wools, coarser, and very long.

As their size indicates, the breeds of this class have been developed for level lands where feed can be obtained without much travel. With proper attention they will thrive upon lands that are too low and wet for the breeds of the middle-wool class, though the keeping of any sheep on marshy ground is not to be advised. The long-wools have been found to thrive in regions of excessive rainfall, the long wool carrying the water off the body as the close fleece will not do. Lambs of the long-wooled breeds do not mature so rapidly nor fatten so young as those of other mutton breeds. On some farms the total weight of the lambs produced by these sheep will be greater in proportion to the land used for the flock than from the smaller breeds, but extra weight in lambs beyond 85 pounds usually lowers the price on the market. The profit from an animal is determined no less by the cost of raising than by what it sells for, and both these things must be taken into account in deciding what class of sheep to raise. The long-wools are favored by only a small proportion of farmers who raise lambs for market.

THE COTSWOLD.

The typical Cotswold is a big-bodied, rather tall sheep, of stylish appearance. The color of the face, ears, and legs is white or white mixed with a little brown. The wool extends up over the poll and hangs in ringlets of varying length over the face. All over the body the wool hangs in long wavy ringlets that do not show in the same way on other breeds. Generally the thigh wool is hairy, though the fleece as a whole is bright, and, on account of having no excess of oil, is light in shrinkage and sells well.

The breeders' association for this breed is American Cotswold Registry Association, F. W. Harding, secretary, Purebred Record Building, Chicago, Ill

THE LINCOLN.

The Lincoln is shorter and more compactly built than the Cotswold. The face and legs are white with occasionally a bluish tinge. The back is very strong, heavily and firmly fleshed. The wool is of great length, though much coarser than that of the shorter woolled breeds. Instead of hanging in the ringlets of the Cotswold it is in larger, broader locks, with a characteristic curl at the outer end.

The breeders' association for this breed is National Lincoln Sheep Breeders' Association, D. T. Knight, secretary, Marlette, Mich.

THE LEICESTER.

The breed commonly known as Leicester is divided into English Leicester and Border Leicester. The English Leicester is well cov-

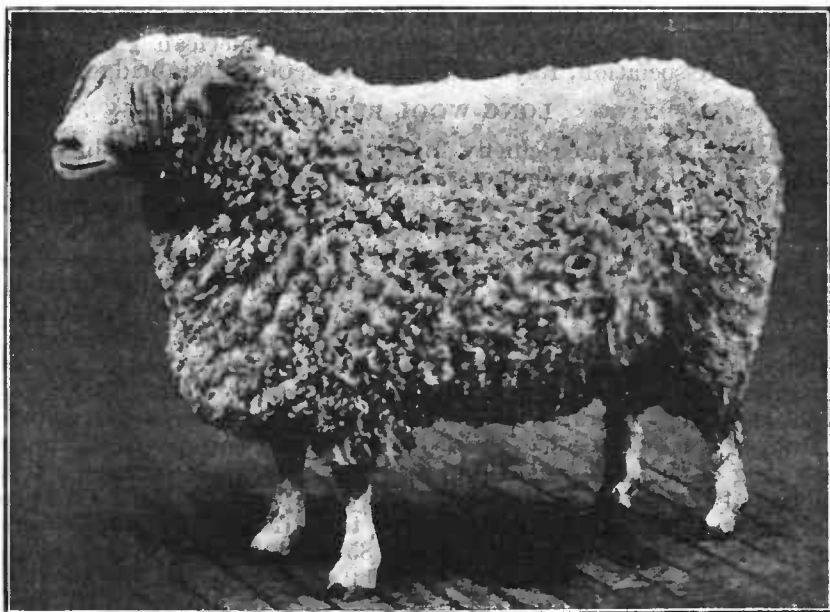


FIGURE 7.—A Cotswold ram.

The shape and strength of bone are typical, as well as the appearance of the fleece and the forelock.

ered with wool at the crown of the head, whereas the head of the Border Leicester is very bare of wool. The back of the Leicesters is very wide and well covered, but the Border Leicesters have less depth of body than other long-wool breeds and with their comparative lightness of belly wool they appear more leggy than the English Leicesters. The face and legs of all Leicesters are white. The fleece hangs in locks smaller than those of the Lincoln and without the Cotswold's appearance of ringlets.

The breeders' association for this breed is the American Leicester Breeders' Association, A. J. Temple, secretary, Cameron, Ill.

OTHER LONG-WOOL BREEDS.

The Romney breed is less well known in the United States than the other long-wool breeds. Though not accustomed to high-class pasturage, the breed ranks close to other long-wools in size. The back is less heavily fleshed than in other breeds of this class, but the hind quarter usually shows a good development.

Wool production has been emphasized by the Romney Marsh breeders, giving a finer fleece than is produced by Cotswolds or Lincolns, and with marked softness and good character.

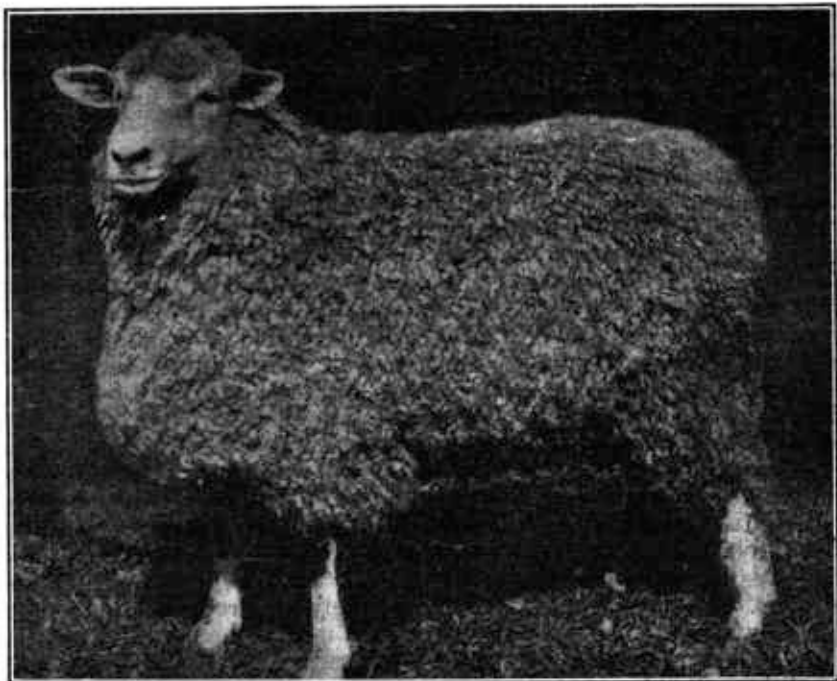


FIGURE 8.—A Lincoln ewe.

The shape of the head and the amount of covering are typical.

The secretary of the American Romney Breeders' Association is Mark Havenhill, Woodland, Calif.

The Corriedale may be classed as a long-wool breed. It was developed in New Zealand by many generations of selection from the descendants of Lincoln-Merino crossbred rams and ewes and has been introduced into Western States. The type is practically intermediate between those of the Lincoln and the Merino, being smaller and less heavily fleshed than the Lincoln and larger and more heavily fleshed than the Merino. The fleece possesses much of the fineness and softness found in the Merino, but with much greater length than occurs in fleeces of the same grade from other breeds. This breed is considered likely to prove most valuable where sheep are bred equally for lambs and wool under range conditions.

The breeders' association for this breed is the American Corriedale Association, F. S. King, secretary, Cheyenne, Wyo.

FINE-WOOL BREEDS.

All fine-wool sheep are descendants of earlier Spanish stock. The American Merinos have been bred nearly altogether for wool. Some breeders of the Delaine, or C type Merino, have bred to some extent for a mutton carcass in addition to fineness and length of wool. In the case of the Rambouillet there has been a greater effort to improve the mutton qualities.

A common characteristic of all Merinos and Rambouillets is the fineness of the wool. It is for this quality they have been bred, and while there are variations, there is as much of uniformity in fineness as in any one character of any class of sheep. This fineness is an important quality of wool, although its value in the market varies from time to time. The length of Merino wool varies, less than one-third of the fleeces being long enough for combing. Wool of the fineness of the Merino and of combing length (over 2 inches) is known as Delaine. The fleeces of fine-wool sheep are heavy in oil or yolk, sometimes losing over 70 per cent in scouring. While sometimes quoted at a seemingly low price per pound on this account, it must be remembered that a fair basis of comparing fleece values is to consider the fleece weight along with its value per pound. Along with the fineness and oil of the fleeces of the fine-wool sheep there is the tendency to wrinkles and folds upon the neck and body, considered as necessary in the production of the finest wool. The extent of the development of wrinkles varies and is referred to later.

Other special features of the fine-wool sheep as a class are: The ability to stand traveling long distances for feed and water, and the instinct to herd closely. It is these qualities that have caused fine-wool sheep to be used so largely on the range. They are slow in maturing, the ewes produce few twins, and do not rank high as mothers and milkers. The ewes are much more likely to breed in spring and summer than are the ewes of most of the mutton breeds, and this has caused them to be used by winter lamb raisers for mating with mutton rams. A few of the rams are hornless, but most of them have strong curving horns. The ewes are always polled. Sheep of this class have been found to thrive under a wide variety of conditions.

THE AMERICAN MERINO.

The statements previously made apply equally to the A, B, and C types of Merinos. In the A and B types the body is considered only so far as is necessary to obtain the vigor and stamina needed to enable the sheep to produce a heavy fleece of fine wool. Some breeders are now giving more attention than formerly to strength of top line and heart girth. The A type is the extreme in the size and number of wrinkles as well as in the fineness of wool. On account of the wrinkles the A type is not considered desirable for commercial wool raisers.

Merinos of the B type are stronger in body than the A's, less heavily wrinkled, and grow wool that is longer but not so fine.

The C type, or Delaine Merino, is larger and less wrinkled than the other types. In rams two good-sized folds on the neck are desired, while the body is sometimes quite smooth. Length of wool is demanded in this type, together with as much of weight and fineness as can be combined with it. Some C type flocks have considerable mutton value and the lambs are fed to be marketed after their first shearing.

While Merinos are recorded as being of A, B, or C type, there is nothing to prevent mating A's and C's to produce B's. In fact, such is common practice. Because of this it is especially necessary to be assured that the parents and grandparents of the ram to be used were of the type it is desired to raise.



FIGURE 9.—An A type Merino ram lamb.

The wrinkles over all parts of the body, the density of the fleece, and the covering of the face and legs are characteristic.

American Merino sheep are registered chiefly with the American and Delaine Merino Record Association, Gowdy Williamson, secretary, Xenia, Ohio.

THE RAMBOUILLET.

The Rambouillet is the largest and strongest bodied of fine-wool sheep. Many Rambouillet breeders give most attention to the fleece, though size is usually more sought for than in the American Merinos. Some of the ewes have backs broad and fleshy enough to compare favorably with the best of the mutton sheep. The rams are likely to be high in the withers and low back of the shoulders. Their size, growthiness, and strong vitality are their strongest points from a mutton standpoint. In selecting for a combination of mutton and wool, much will depend upon the course followed by the breeder of the flock from which the purchase is made.

Rambouillet fleeces vary in fineness and length, but are usually quite dense. They carry less oil than the American Merinos, but afford ample protection from storms and low temperatures of any section.

In selecting fine-wool rams it is necessary to be correctly informed in regard to the actual age of the fleece and to know whether or not the wool was shorn close to the skin over all parts of the body at the previous shearing.

The breeders' association for this breed is the American Rambouillet Sheep Breeders' Association, Dwight Lincoln, secretary, Marysville, Ohio.



FIGURE 10.—A Rambouillet ewe.

The size and squareness of form with face and leg covering are characteristic of the best Rambouillets.

CROSS-BRED SHEEP.

It is sometimes, though rarely, good policy to cross breeds of sheep. In a farm flock that is to be maintained and enlarged by keeping ewe lambs raised, sires of the same breed should be used continuously. If it appears really necessary to change breeds it will be quicker and cheaper to sell the stock on hand and start over again.

Useful farm flocks of wool and mutton type can be established by the use of rams of the breed selected upon fine-wool ewes or upon native ewes of no definite breeding, and replacing the original stock with the good young ewes having the largest amount of the blood of the breed adopted. In many cases it is good policy to buy such ewes as represent the greatest value at the price at which they are offered, and to effect the necessary change by careful culling and the use of rams of the highest excellence.